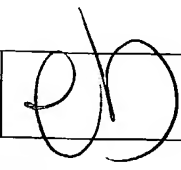


Notice of Allowability	Application No.	Applicant(s)	
	10/627,743	PAK ET AL.	
	Examiner	Art Unit	
Patricia L. Hailey	1755		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' Information Disclosure Statement, filed October 29, 2003.
2. ☒ The allowed claim(s) is/are 1-34.
3. ☒ The drawings filed on 28 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>7/26/04</u> |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>10/29/03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


Mark L. Bell
 Supervisory Patent Examiner
 Technology Center 1700

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles Wieland on July 15 and 26, 2004.

The application has been amended as follows:

a. Please cancel claims 35-40 without prejudice or disclaimer.

Claims 35-40 have been canceled because they were subject to a restriction requirement.

Allowable Subject Matter

2. Claims 1-34 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or suggest the claimed process for making a carbon molecular sieve, wherein pores of a mesoporous silica molecular sieve (used as a template) are impregnated with a mixture of: a silica oligomer, a condensable or polymerizable carbon-containing compound (used as a carbon

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precursor), and a liquid carrier, the carbon precursor is polymerized to form a carbon precursor polymer within the pores of the template, and the carbon precursor is then carbonized via pyrolysis, and the template and silica oligomer are removed using a solution capable of dissolving silica.

Ryoo et al. (U. S. Patent Application Publication No. 2002/0187896) teaches a process for manufacturing a carbon molecular sieve similar to Applicants' claimed process, with the exception that Ryoo et al. do not teach or suggest the presence of a silica oligomer in the mixture impregnated into the pores of the mesoporous molecular sieve.

Fan et al. (U. S. Patent No. 6,471,761) disclose a coating composition comprising TEOS (tetraethylorthosilicate), a surfactant, at least one organosilane, HCl, water and ethanol. While this reference teaches the components of Applicants' "silica oligomer" (the reaction product of TEOS and HCl, see the paragraph bridging pages 5 and 6 of Applicants' Specification), this reference does not teach or suggest Applicants' claimed process for manufacturing a carbon molecular sieve, nor does this reference teach or suggest Applicants' claimed carbon molecular sieve.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on July 28, 2003.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

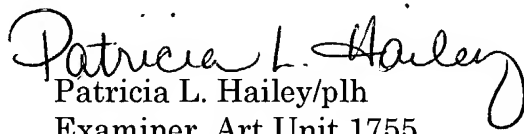
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Thursdays.

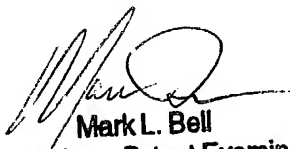
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Patricia L. Hailey/plh
Examiner, Art Unit 1755
July 26, 2004


Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700